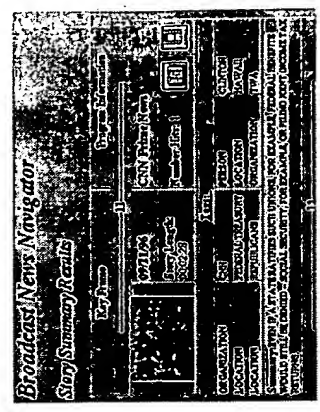


# Broadcast News Navigator (BNN) <sup>200</sup>



Web-based Browse/Search by:

- Time
- Program
- Keyword
- Person
- Location
- Subject

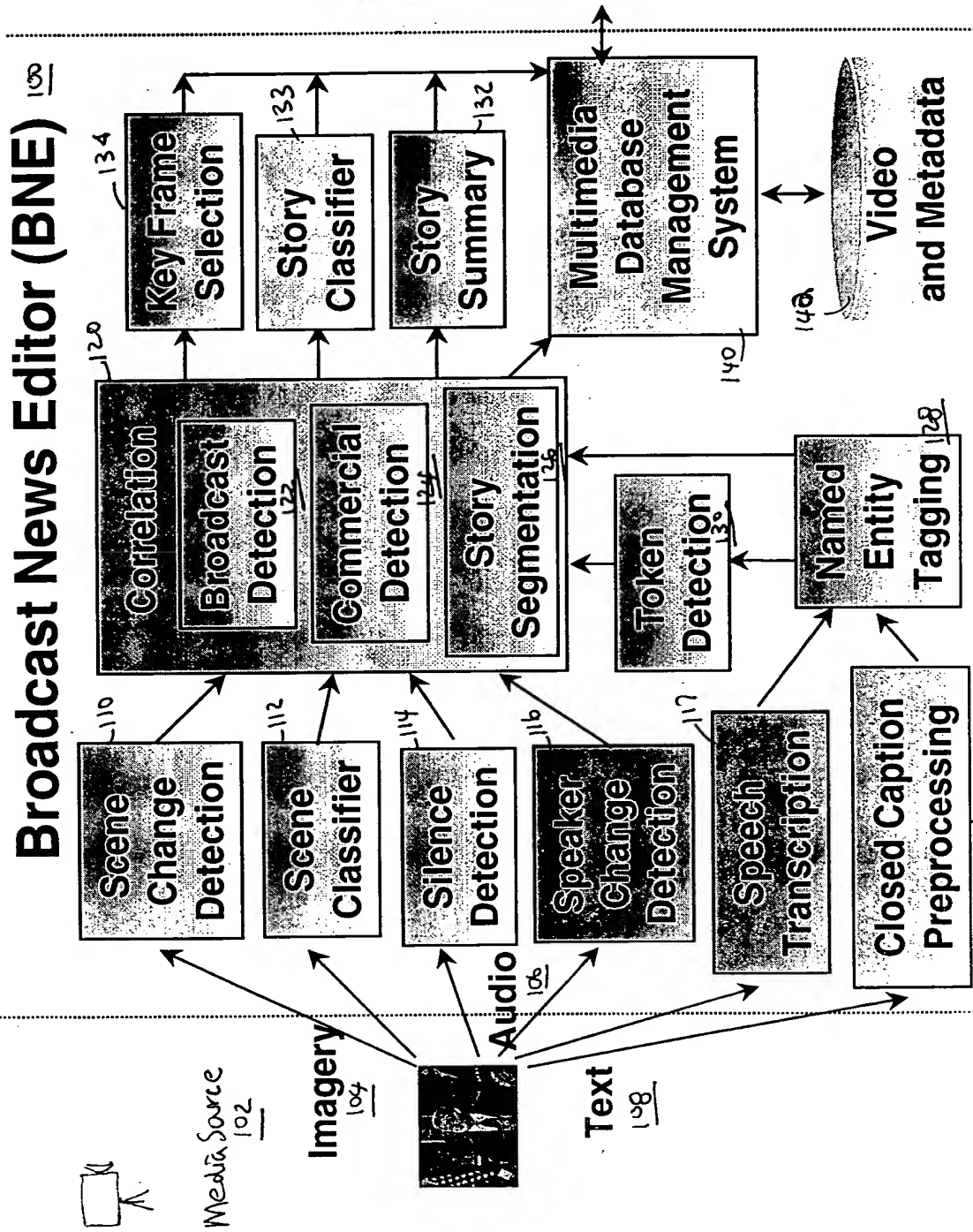
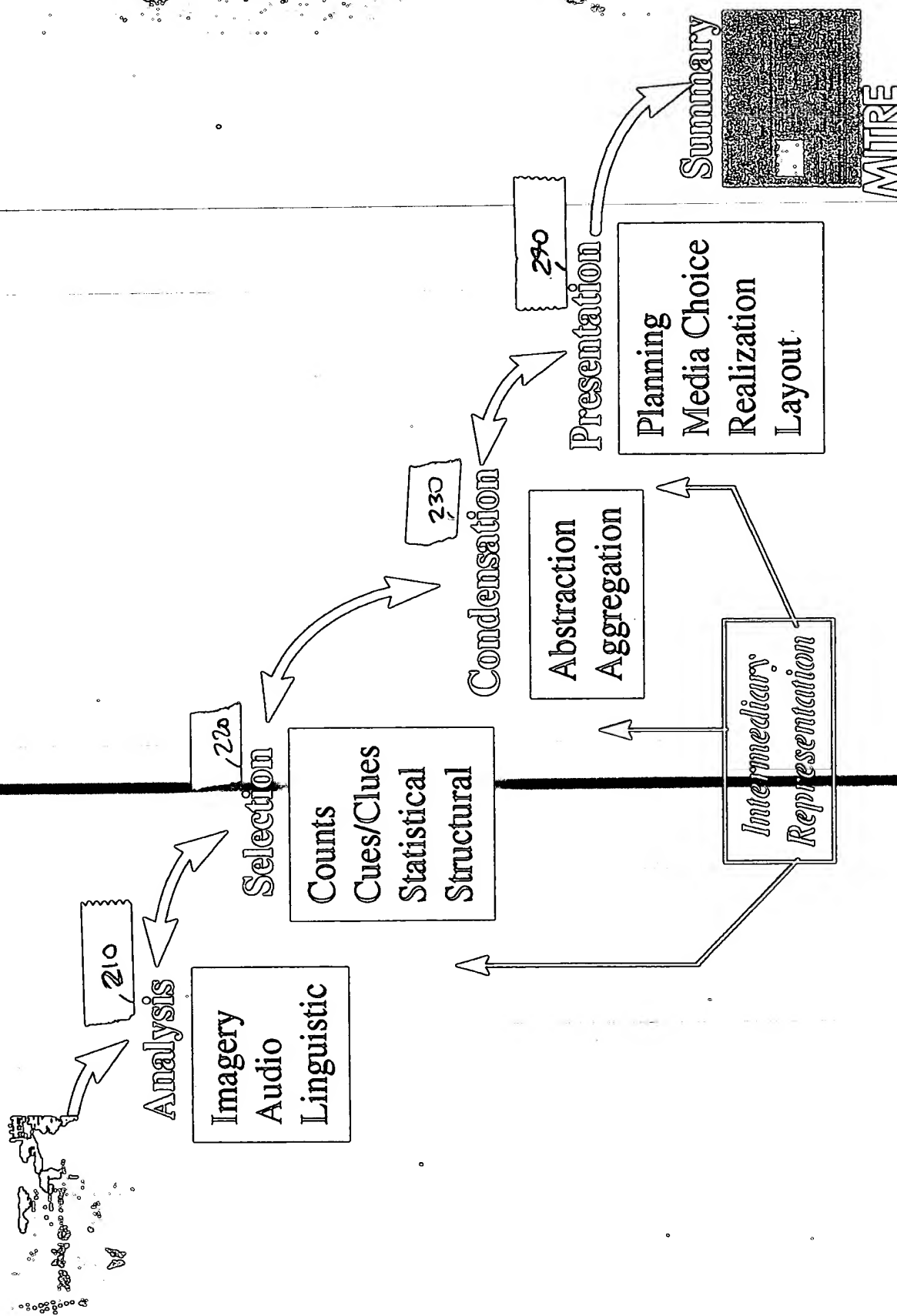


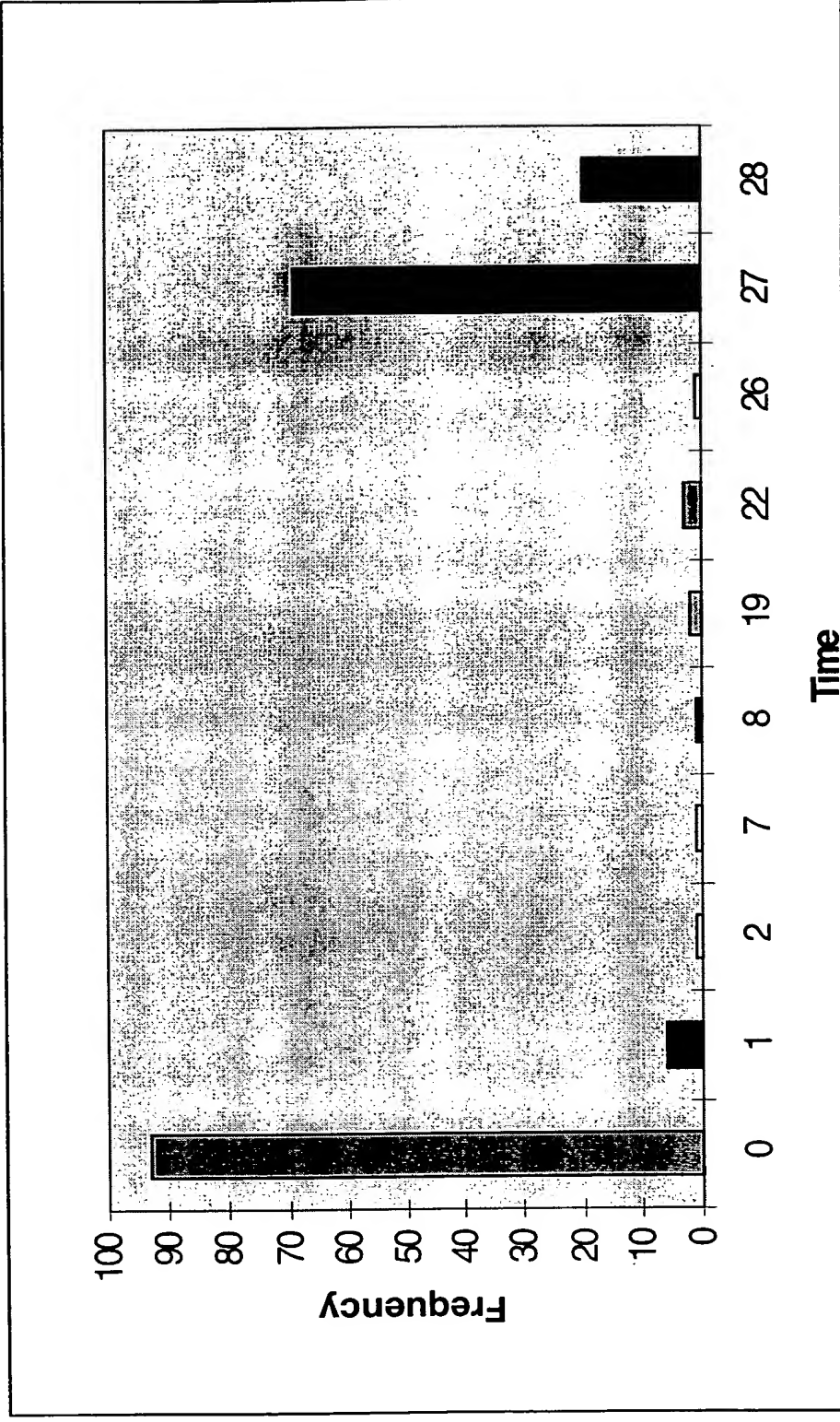
FIG. 1

# Video Summarization



[illegible]

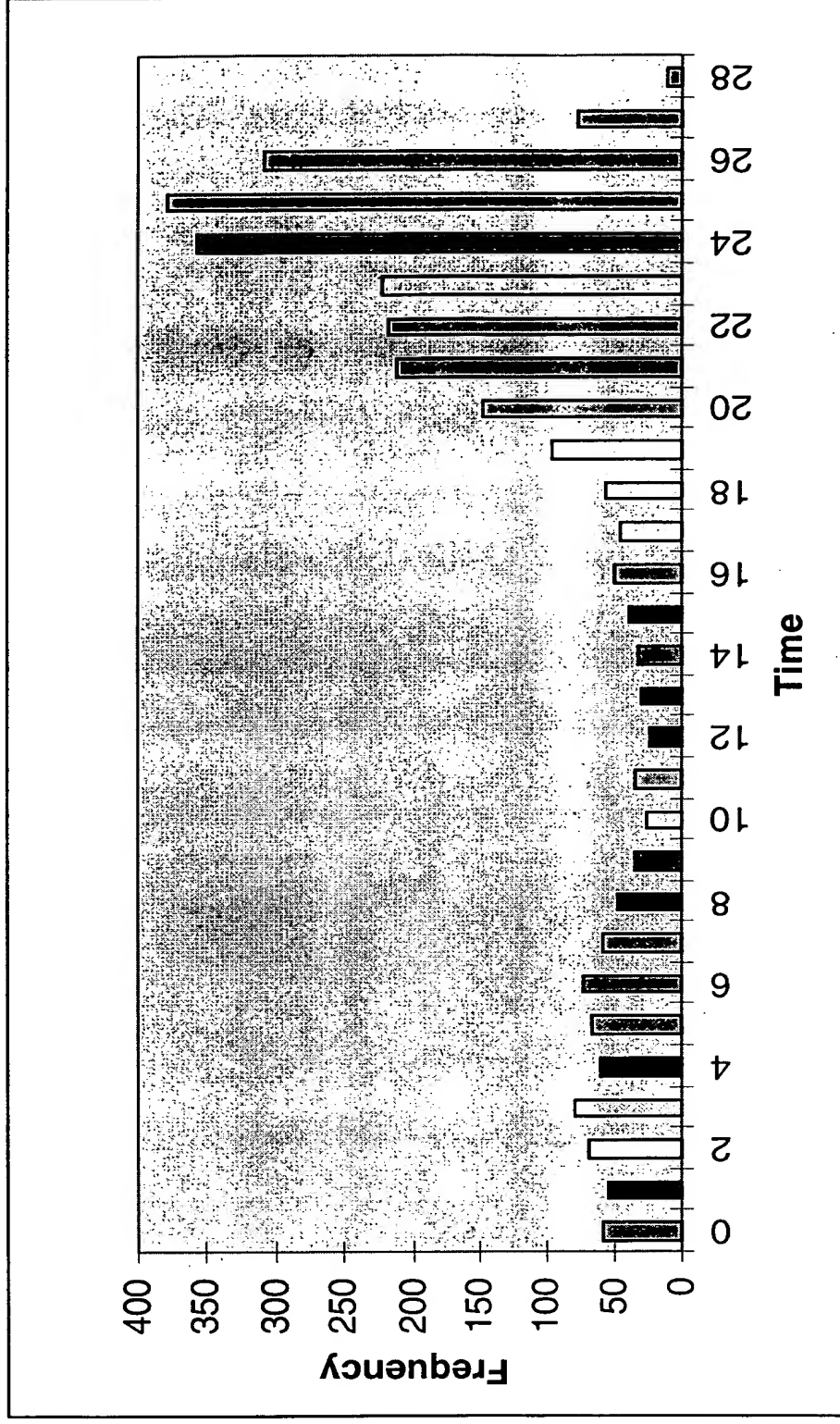
# Phrase Frequency -- “I”M” <Person>



## Uses Phrase “I’m” and Alembic’s detection of a <Person>

3/6/17

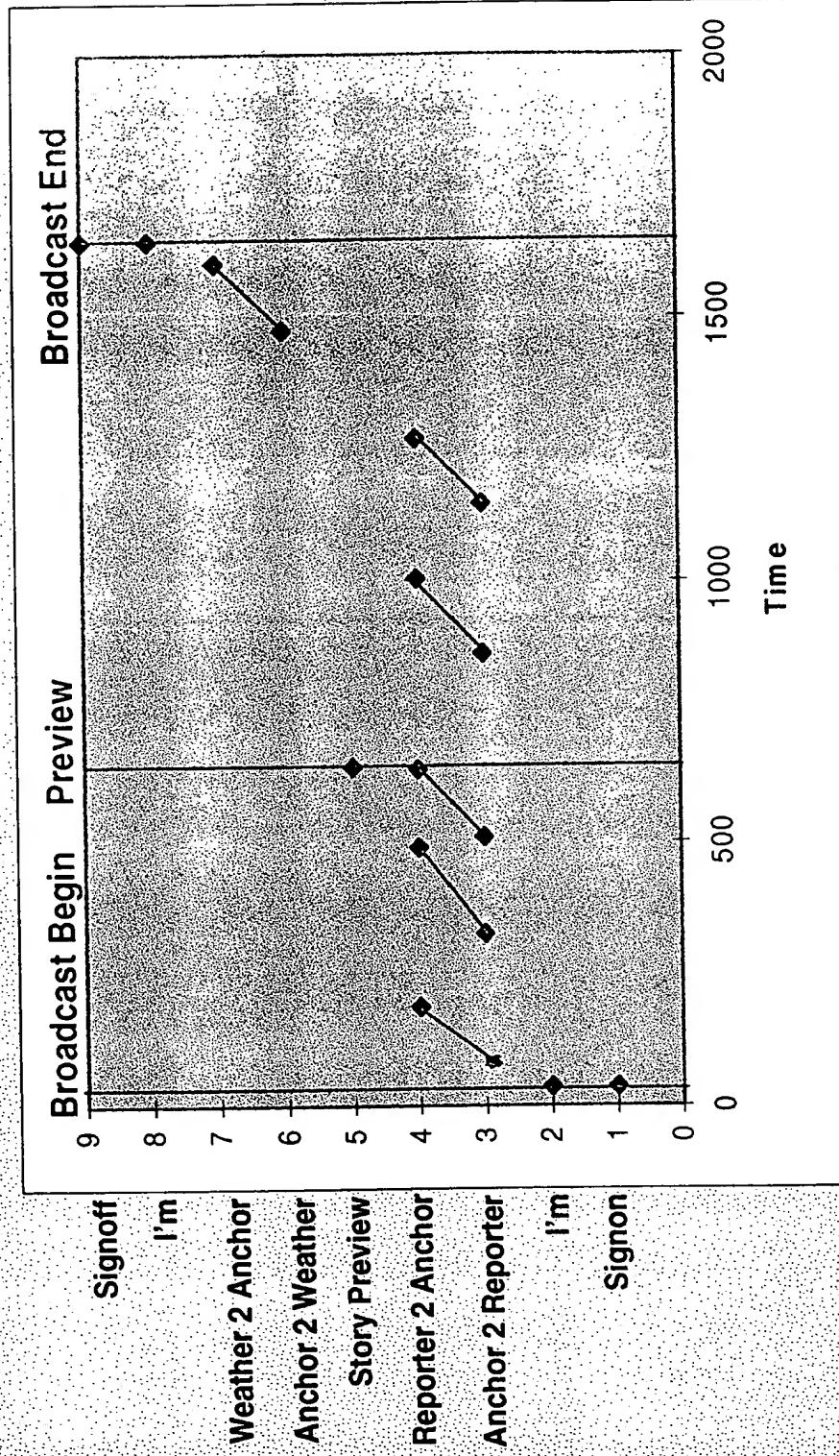
# Weather Term Frequency



Most CNN Prime News weather forecasts start after 18 minutes.

FIG. 4

# BNA Textual Tokens



Automatic Detection

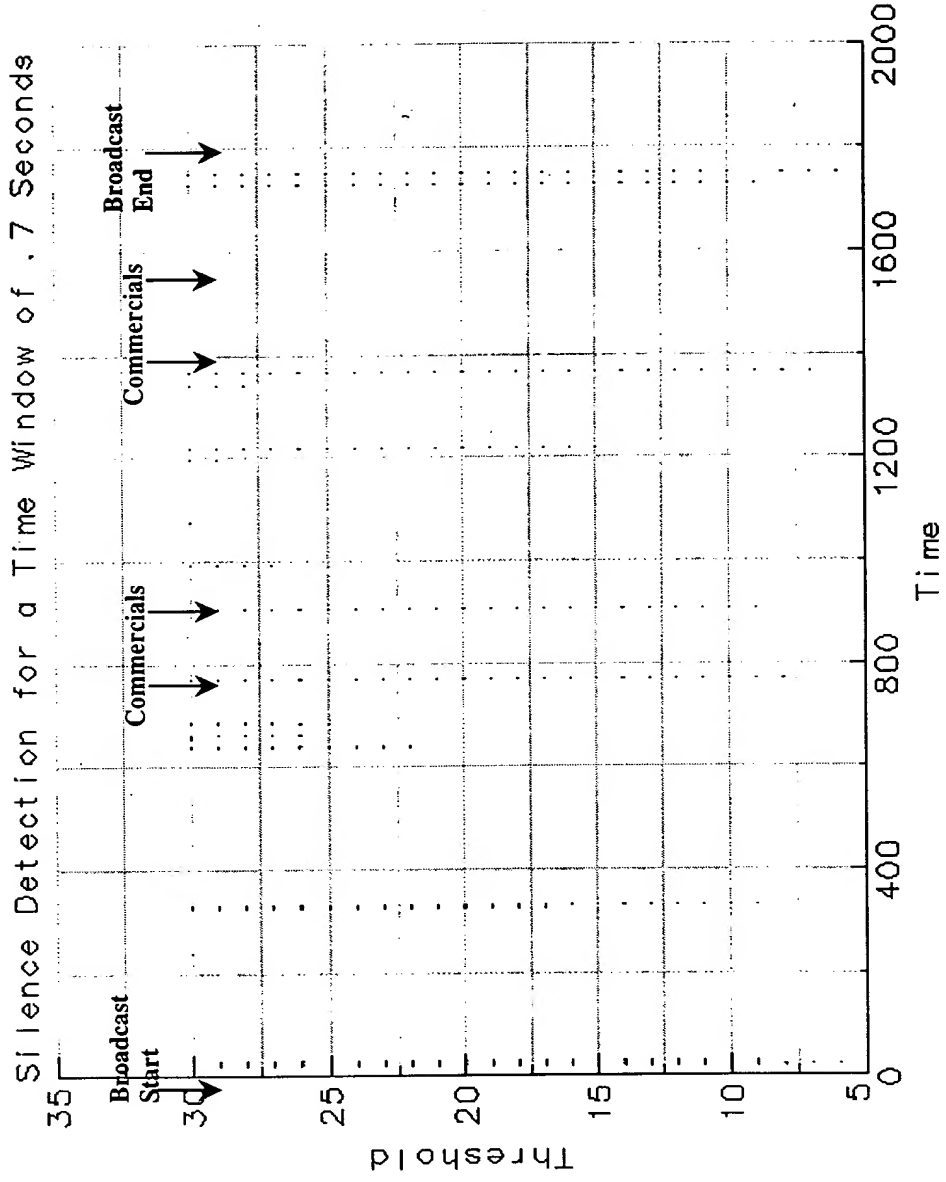
Truth

No Anchor Replacements

CNN Prime 2/25/97

FIG. 5

# Silence Detection



# Scene Classification

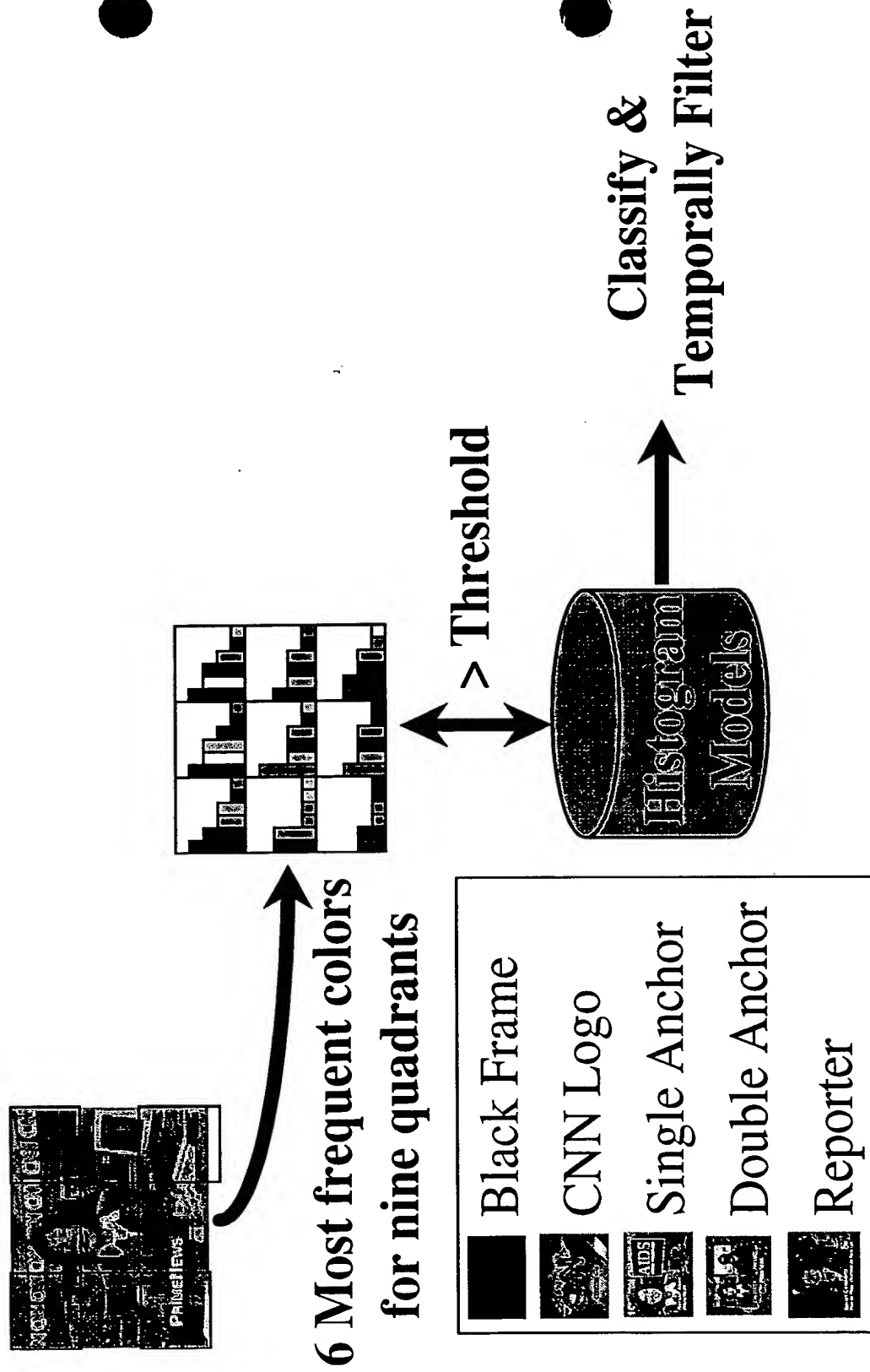


FIG. 7





# CNN Prime News 3/24/97



9/6/4

# Broadcast News Analysis:

## Story Segment Identification Overview

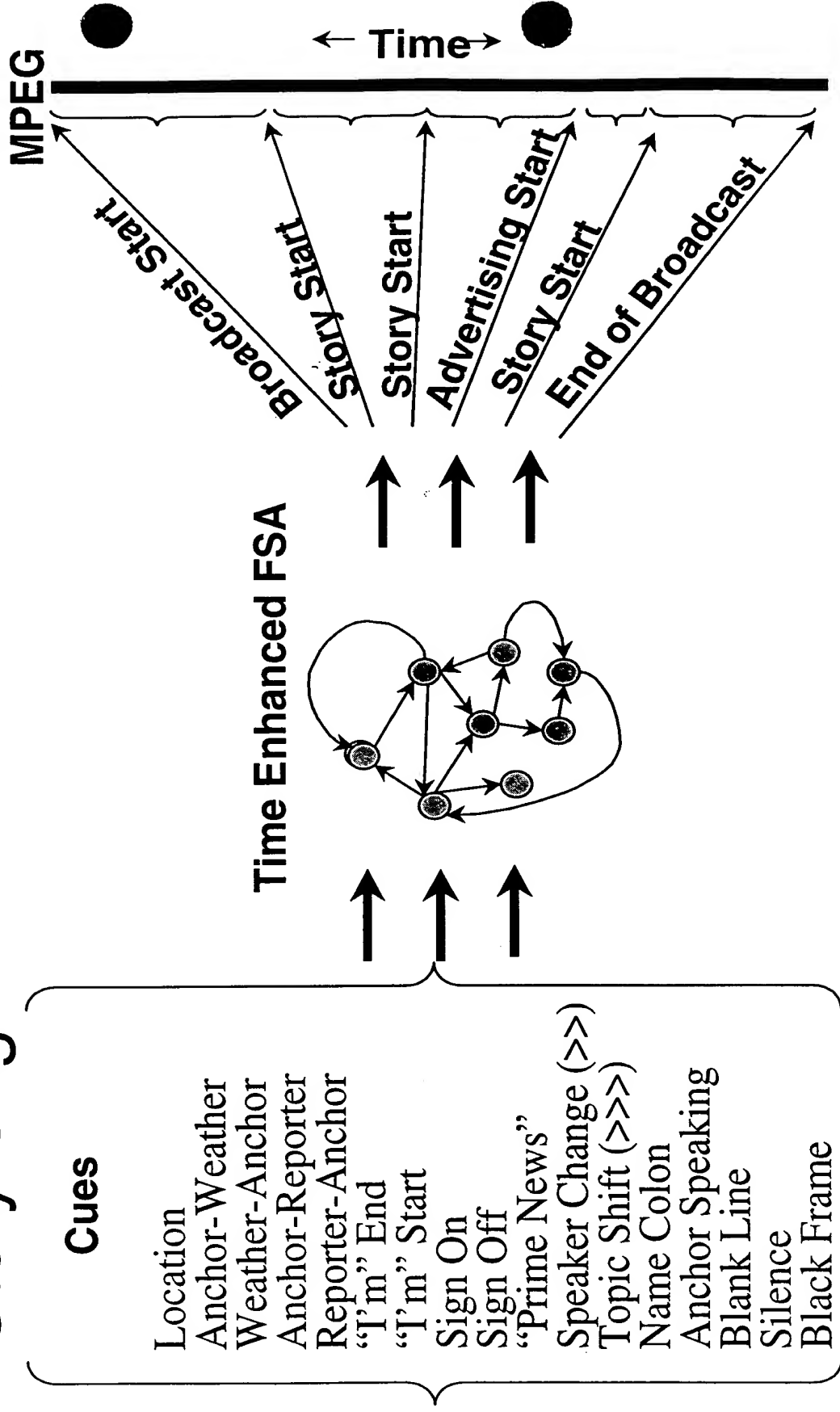


FIG. 10



State\_ID Description

- 1 Start
- 2 Wait for Broadcast Start
- 3 Highlights Begin
- 4 Highlights are ending
- 5 Story Segment Detected
- 6 Start of Story
- 7 Near end of Story
- 8 Advert Story Segment
- 9 Wait for Advert End
- 10 Broadcast End Story Segment
- 11 Broadcast Over
- 12 Story Buffer
- 13 Possible Advertisement
- 14 Very Possible Advertisement
- 15 Prime Possible Advertisement
- 16 Prime Highlight
- 17 Very Near Start
- 18 Possible end of Broadcast
- 19 Very Possible End
- 20 End Story Segment
- 21 End Broadcast
- 22 Reporter Segment

FIG. 12

SECRET

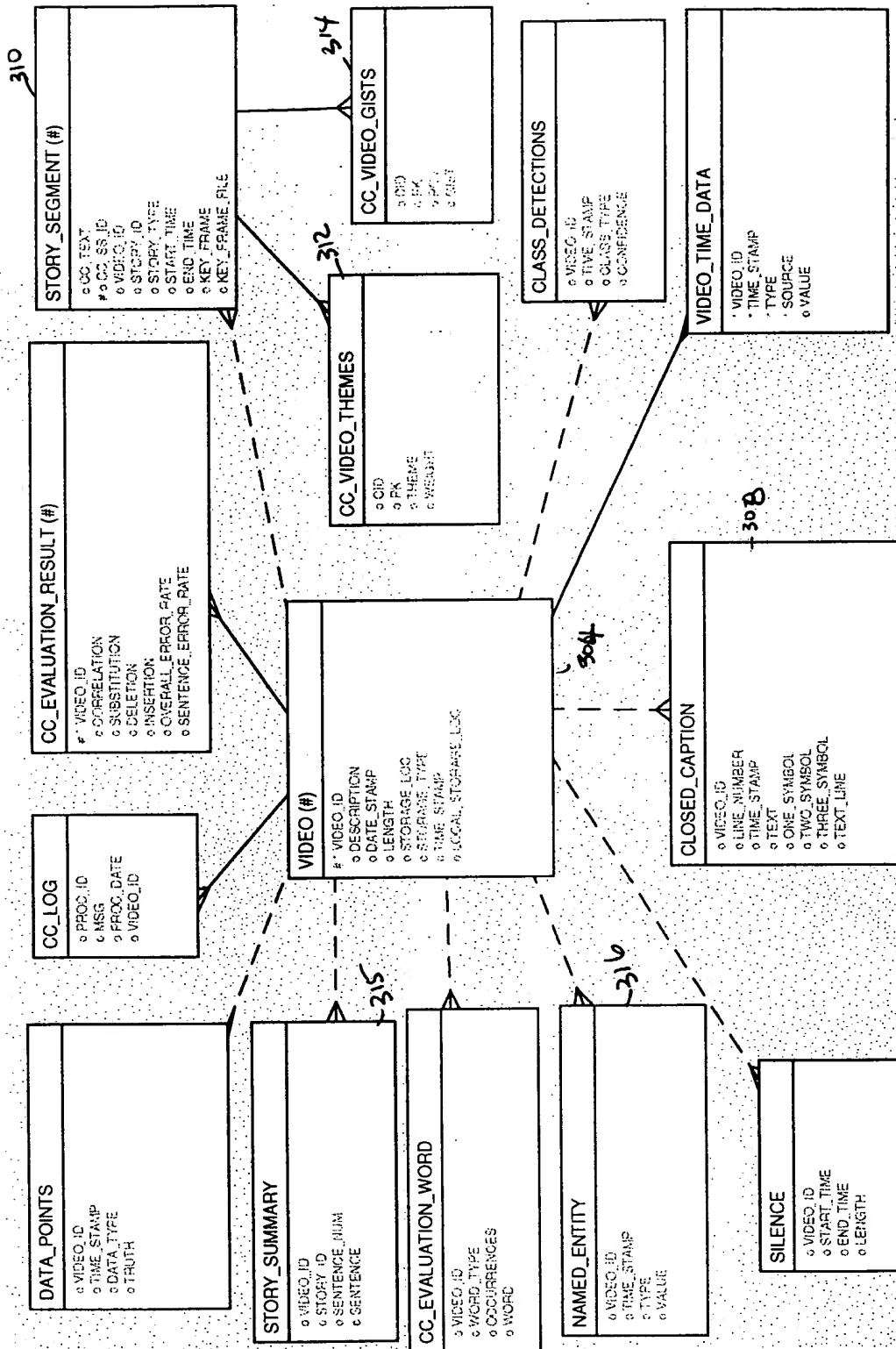
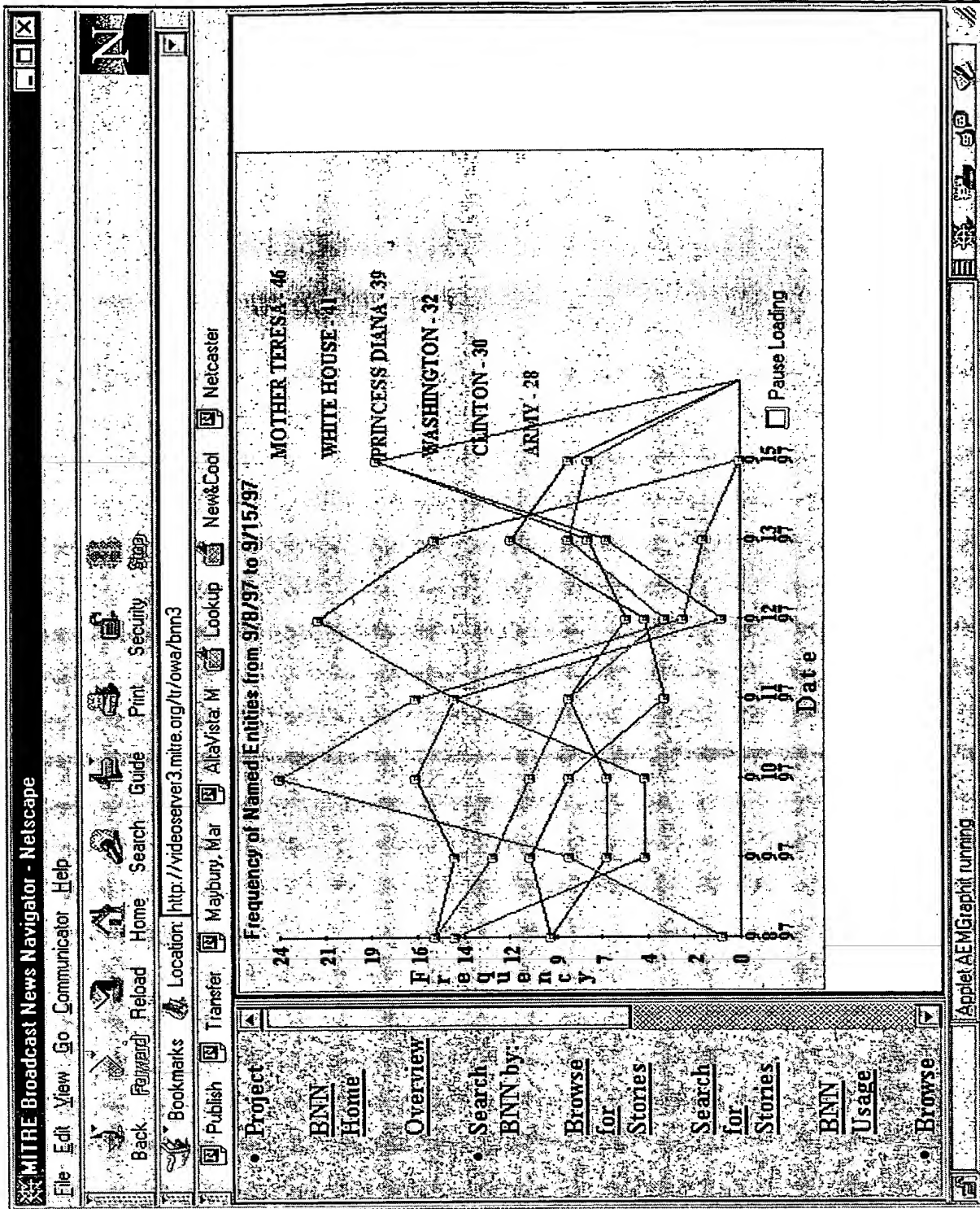


FIG. 13

# Visualizing the News



# Broadcast News Navigator Query Screen

- Project
- BNN
- Home
- Overview
- Search BNN by
- Browse for Stories
- Search for Stories
- BNN Usage
- Browse Other Sources

## Broadcast News Navigator Story Search Tool

Select the type of News source(s), the period of time, and the types of tags you are interested in searching.

### News Source

- ☐ 60 Minutes
- ☐ ABC News Nightline
- ☐ ABC World News
- ☐ Andy's Story Segmentation Evaluation
- ☐ CBS Evening News
- ☐ CNN Early Prime
- ☐ CNN Headline News
- ☐ CNN International

### Type of Search

- ☒ Text Search
- ☐ Topic Search
- ☐ Person Search
- ☐ Organization Search
- ☐ Location Search

### Broadcast Dates

☐ From Date

☐ To Date

- ☐ Last 24 hrs
- ☐ Last 3 days [From 24-SEP-1997]
- ☐ Last Week [From 20-SEP-1997]
- ☐ Last 2 Weeks [From 13-SEP-1997]
- ☐ Last Month [From 28-AUG-1997]
- ☐ Last 3 Months [From 29-JUN-1997]
- ☐ Last 6 Months [From 28-MAR-1997]
- ☐ Last Year [From 27-SEP-1996]

FIG. 15



# BNN Browse

MITRE Broadcast News Navigator - Netscape

File Edit View Go Communicator Help

Back Forward Reload Home Search Guide Print Security Stop

Bookmarks Location: http://videosever3.mitre.org/lt/owa/bnn3

BNN Andy's Sched CWW Lookup News&Cool Netcaster

Project

BNN

Home

Overview

Search

BNN by

Browse for

Stories

Search for

Stories

BNN

Usage

Browse

Other

Sources

Story Index for Story(s): 1 to 100

<div>CNN Prime News 21-OCT-1997</div> <div></div> <div>CLINTON 1990 CNN</div>	<div>CNN Prime News 21-OCT-1997</div> <div></div> <div>CLINTON 1990 CNN</div>	<div>CNN Prime News 21-OCT-1997</div> <div></div> <div>CLINTON 1990 CNN</div>	<div>CNN Prime News 21-OCT-1997</div> <div></div> <div>CLINTON 1990 CNN</div>
<div>CNN Prime News 21-OCT-1997</div> <div></div> <div>CLINTON 1990 CNN</div>	<div>CNN Prime News 21-OCT-1997</div> <div></div> <div>CLINTON 1990 CNN</div>	<div>CNN Prime News 21-OCT-1997</div> <div></div> <div>CLINTON 1990 CNN</div>	<div>CNN Prime News 21-OCT-1997</div> <div></div> <div>CLINTON 1990 CNN</div>
<div>CNN Prime News 21-OCT-1997</div> <div></div> <div>CLINTON 1990 CNN</div>	<div>CNN Prime News 21-OCT-1997</div> <div></div> <div>CLINTON 1990 CNN</div>	<div>CNN Prime News 21-OCT-1997</div> <div></div> <div>CLINTON 1990 CNN</div>	<div>CNN Prime News 21-OCT-1997</div> <div></div> <div>CLINTON 1990 CNN</div>
<div>CNN Prime News 21-OCT-1997</div> <div></div> <div>CLINTON 1990 CNN</div>	<div>CNN Prime News 21-OCT-1997</div> <div></div> <div>CLINTON 1990 CNN</div>	<div>CNN Prime News 21-OCT-1997</div> <div></div> <div>CLINTON 1990 CNN</div>	<div>CNN Prime News 21-OCT-1997</div> <div></div> <div>CLINTON 1990 CNN</div>

http://videosever3.mitre.org/lt/owa/bnn3?evb=proc\_bnn\_browse?NewsAgency=dummy&NewsAgency=CNN

FIG. 16



# BNN Browsing: “Pentagon”

Fig. 17

# Web-user Identifies Time Period and Story Topic of Interest

## Broadcast News Navigator

*Tag Frequencies for the Last 7 Days*

Occurrences	Type	Value
86	ORGANIZATION	CNN
58	LOCATION	SIMPSON
45	PERSON	LINDEN
42	PERSON	NATALIE
31	PERSON	CLINTON
26	PERSON	OF SIMPSON
25	PERSON	JEANNE
15	LOCATION	WASHINGTON
14	ORGANIZATION	WHITEHOUSE
14	PERSON	NICOLE BROWN SIMPSON

User  
Selects

FIG. 18


**Search Conditions:**

Location: ZAIRE

From Date: 03/22/97

To Date: 03/29/97

**Key Frame**




**Program Information**


CNN Prime News

Number Hits: 4


**Video**



**Closed Caption**



**Source**



**03/23/97**

**Story Length:**  
00:00:39

**Tags:**

LOCATION	ZAIRE	DATE	SUNDAY
LOCATION	BRAZZAVILLE	LOCATION	CONGO
PERSON	MOBUTU	PERSON	MOBUTU SISE

Summary: ARE IN BRAZZAVILLE CONGO READY TO BE EVACUATED AMERICANS FROM NEIGHBORING ZAIRE SHOULD THAT BECOME NECESSARY.

**6 Most Frequent Tags**

**Related Web Sites**

**Summary**

FIG. 19

# Viewing the Video

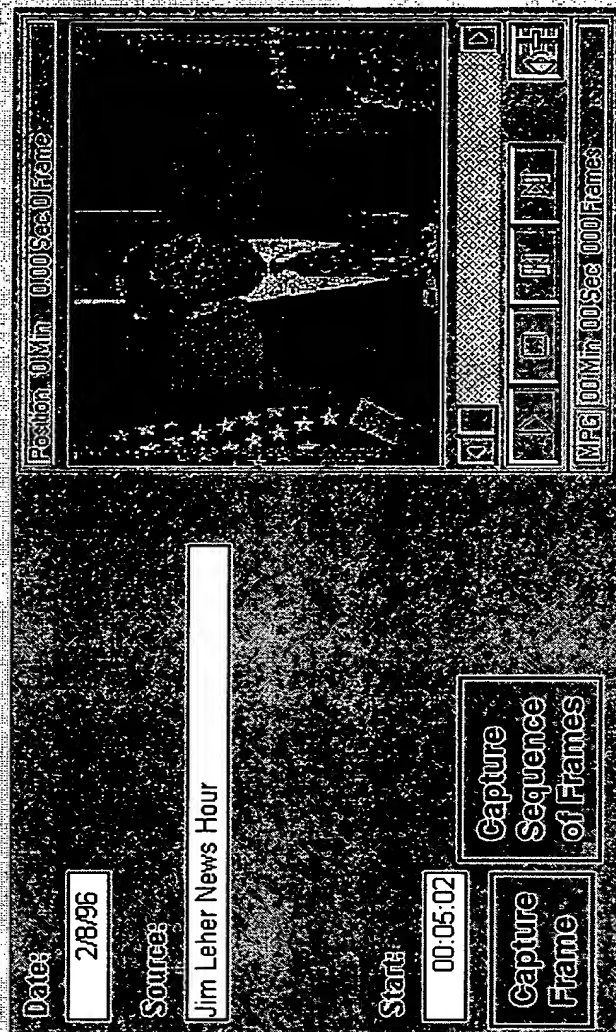


FIG. 20



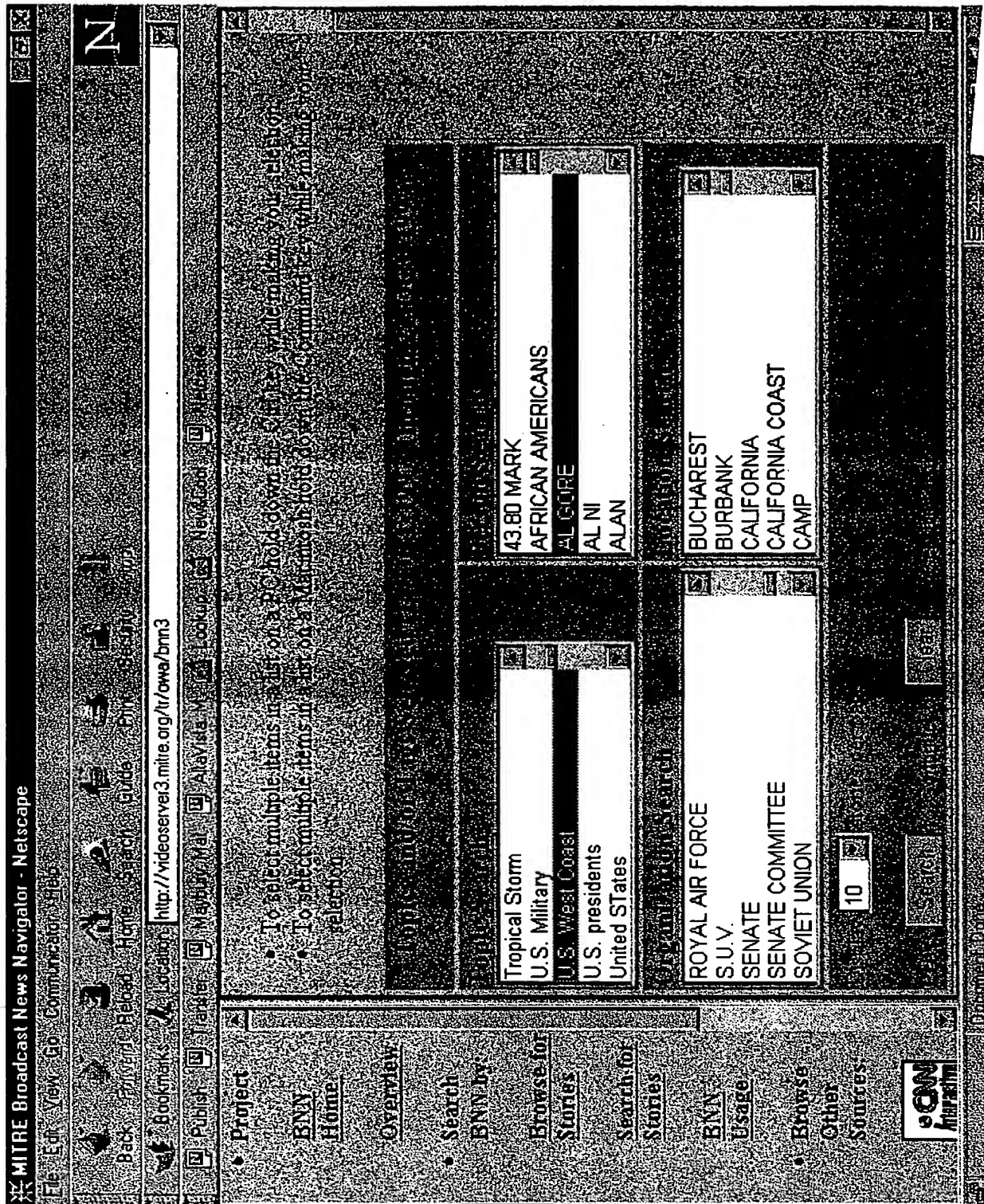


FIG. 21

